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#2 OIPE

RAW SEQUENCE LISTING

DATE: 09/21/2001

PATENT APPLICATION: US/09/943,334

TIME: 20:46:45

Input Set : A:\tcs411div1.txt

Output Set: N:\CRF3\09212001\I943334.raw

ENTERED

3 <110> APPLICANT: Rittershaus, Charles W.

4 Thomas, Lawrence J.

6 <120> TITLE OF INVENTION: MODULATION OF CHOLESTERYL ESTER TRANSFER PROTEIN (CETP)

ACTIVITY

8 <130> FILE REFERENCE: TCS-411.1P US-1; Tcs-411.1P US-2

C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/943,334

11 <141> CURRENT FILING DATE: 2001-08-30

13 <150> PRIOR APPLICATION NUMBER: 08/432,483

14 <151> PRIOR FILING DATE: 1995-05-01

16 <150> PRIOR APPLICATION NUMBER: PCT/US96/06147

17 <151> PRIOR FILING DATE: 1996-05-01

19 <150> PRIOR APPLICATION NUMBER: 08/945,289

20 <151> PRIOR FILING DATE: 1997-10-17

22 <160> NUMBER OF SEQ ID NOS: 9

24 <170> SOFTWARE: PatentIn version 3.1

26 <210> SEQ ID NO: 1

27 <211> LENGTH: 26

28 <212> TYPE: PRT

29 <213> ORGANISM: Artificial Sequence

31 <220> FEATURE:

32 <223> OTHER INFORMATION: C - terminal 26 amino acids of Human CETP

34 <400> SEQUENCE: 1

36 Arg Asp Gly Phe Leu Leu Leu Gln Met Asp Phe Gly Phe Pro Glu His

37 1 5 10 15

40 Leu Leu Val Asp Phe Leu Gln Ser Leu Ser

41 20 25

44 <210> SEQ ID NO: 2

45 <211> LENGTH: 31

46 <212> TYPE: PRT

47 <213> ORGANISM: Artificial Sequence

49 <220> FEATURE:

50 <223> OTHER INFORMATION: vaccine peptide of the invention

52 <400> SEQUENCE: 2

54 Cys Gln Tyr Ile Lys Ala Asn Ser Lys Phe Ile Gly Ile Thr Glu Phe

55 1 5 10 15

58 Gly Phe Pro Glu His Leu Leu Val Asp Phe Leu Gln Ser Leu Ser

59 20 25 30

62 <210> SEQ ID NO: 3

63 <211> LENGTH: 21

64 <212> TYPE: PRT

65 <213> ORGANISM: Artificial Sequence

67 <220> FEATURE:

68 <223> OTHER INFORMATION: helper T cell epitope of tetanus toxin

70 <400> SEQUENCE: 3

72 Phe Asn Asn Phe Thr Val Ser Phe Trp Leu Arg Val Pro Lys Val Ser

73 1 5 10 15

76 Ala Ser His Leu Glu

77 20

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80 <210> SEQ ID NO: 4
81 <211> LENGTH: 476
82 <212> TYPE: PRT
83 <213> ORGANISM: Homo Sapiens
85 <400> SEQUENCE: 4
87 Cys Ser Lys Gly Thr Ser His Glu Ala Gly Ile Val Cys Arg Ile Thr
88 1 5 10 15
91 Lys Pro Ala Leu Leu Val Leu Asn His Glu Thr Ala Lys Val Ile Gln
92 20 25 30
95 Thr Ala Phe Gln Arg Ala Ser Tyr Pro Asp Ile Thr Gly Glu Lys Ala
96 35 40 45
99 Met Met Leu Leu Gly Gln Val Lys Tyr Gly Leu His Asn Ile Gln Ile
100 50 55 60
103 Ser His Leu Ser Ile Ala Ser Ser Gln Val Glu Leu Val Glu Ala Lys
104 65 70 75 80
107 Ser Ile Asp Val Ser Ile Gln Asn Val Ser Val Val Phe Lys Gly Thr
108 85 90 95
111 Leu Lys Tyr Gly Tyr Thr Thr Ala Trp Trp Leu Gly Ile Asp Gln Ser
112 100 105 110
115 Ile Asp Phe Glu Ile Asp Ser Ala Ile Asp Leu Gln Ile Asn Thr Gln
116 115 120 125
119 Leu Thr Cys Asp Ser Gly Arg Val Arg Thr Asp Ala Pro Asp Cys Tyr
120 130 135 140
123 Leu Ser Phe His Lys Leu Leu Leu His Leu Gln Gly Glu Arg Glu Pro
124 145 150 155 160
127 Gly Trp Ile Lys Gln Leu Phe Thr Asn Phe Ile Ser Phe Thr Leu Lys
128 165 170 175
131 Leu Val Leu Lys Gly Gln Ile Cys Lys Glu Ile Asn Val Ile Ser Asn
132 180 185 190
135 Ile Met Ala Asp Phe Val Gln Thr Arg Ala Ala Ser Ile Leu Ser Asp
136 195 200 205
139 Gly Asp Ile Gly Val Asp Ile Ser Leu Thr Gly Asp Pro Val Ile Thr
140 210 215 220
143 Ala Ser Tyr Leu Glu Ser His His Lys Gly His Phe Ile Tyr Lys Asn
144 225 230 235 240
147 Val Ser Glu Asp Leu Pro Leu Pro Thr Phe Ser Pro Thr Leu Leu Gly
148 245 250 255
151 Asp Ser Arg Met Leu Tyr Phe Trp Phe Ser Glu Arg Val Phe His Ser
152 260 265 270
155 Leu Ala Lys Val Ala Phe Gln Asp Gly Arg Leu Met Leu Ser Leu Met
156 275 280 285
159 Gly Asp Glu Phe Lys Ala Val Leu Glu Thr Trp Gly Phe Asn Thr Asn
160 290 295 300
163 Gln Glu Ile Phe Gln Glu Val Val Gly Gly Phe Pro Ser Gln Ala Gln
164 305 310 315 320
167 Val Thr Val His Cys Leu Lys Met Pro Lys Ile Ser Cys Gln Asn Lys
168 325 330 335
171 Gly Val Val Val Asn Ser Ser Val Met Val Lys Phe Leu Phe Pro Arg
172 340 345 350

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175 Pro Asp Gln Gln His Ser Val Ala Tyr Thr Phe Glu Glu Asp Ile Val
176          355          360          365
179 Thr Thr Val Gln Ala Ser Tyr Ser Lys Lys Lys Leu Phe Leu Ser Leu
180          370          375          380
183 Leu Asp Phe Gln Ile Thr Pro Lys Thr Val Ser Asn Leu Thr Glu Ser
184 385          390          395          400
187 Ser Ser Glu Ser Ile Gln Ser Phe Leu Gln Ser Met Ile Thr Ala Val
188          405          410          415
191 Gly Ile Pro Glu Val Met Ser Arg Leu Glu Val Val Phe Thr Ala Leu
192          420          425          430
195 Met Asn Ser Lys Gly Val Ser Leu Phe Asp Ile Ile Asn Pro Glu Ile
196          435          440          445
199 Ile Thr Arg Asp Gly Phe Leu Leu Leu Gln Met Asp Phe Gly Phe Pro
200          450          455          460
203 Glu His Leu Leu Val Asp Phe Leu Gln Ser Leu Ser
204 465          470          475
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208 <211> LENGTH: 1428
209 <212> TYPE: DNA
210 <213> ORGANISM: Homo Sapiens
212 <400> SEQUENCE: 5
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215 ctggtgttga accacgagac tgccaagggtg atccagaccg ccttcacagcg agccagctac 120
217 ccagatatca cgggcgagaa ggccatgatg ctcccttgcc aagtcaagta tgggttgacac 180
219 aacatccaga tcagccactt gtccatcgcc agcagccagg tggagctggt ggaagccaag 240
221 tccattgatg tctccattca gaacgtgtct gtggtcttca aggggaccct gaagtatggc 300
223 tacaccactg cctggtggct ggggtattgat cagtccattg acttcgagat cgactctgcc 360
225 attgacctcc agatcaacac acagctgacc tgtgactctg gttagagtgcg gaccgatgcc 420
227 cctgactgct acctgtcttt ccataagctg ctctctgcatc tccaagggga gcgagagcct 480
229 ggggtggatca agcagctggt cacaatttct atctccttca ccctgaagct ggtcctgaag 540
231 ggacatgctc gcaaagatg caacgctcatc tctaactca tggccgattt tgtccagaca 600
233 agggctgcca gcatccttct agatggagac attgggtggg acatttccct gacaggtgat 660
235 ccgctcatca cagcctccta cctggagtcc catcacaagg gtcatttcat ctacaagaat 720
237 gtctcagagg acctccccct cccaccttct tcgcccacac tgctggggga ctcccgcagt 780
239 ctgtacttct ggttctctga gcgagtcttc cactcgtcgg ccaaggtagc tttccagqat 840
241 ggccgcctca tgctcagcct gatgggagac gagttcaagg cagtgcctgga gacctggggc 900
243 ttcaacacca accaggaaat cttccaagag gttgtcggcg gcttccccag ccaggcccaa 960
245 gtcaccgtcc actgcctcaa gatgcccaag atctcctgcc aaaacaaggg agtcgtggtc 1020
247 aattcttcag tgatggtgaa attcctcttt ccacgcccag accagcaaca ttctgtagct 1080
249 tacacatttg aagaggatat cgtgactacc gtccaggcct cctattctaa gaaaaagctc 1140
251 ttcttaagcc tcttggaatt ccagattaca ccaaagactg tttccaactt gactgagagc 1200
253 agctccagag ccatccagag ctctctgcag tcaatgatca ccgctgtggg catccctgag 1260
255 gtcagtcttc ggtcagaggt agtgtttaca gccctcatga acagcaaagg cgtgagcctc 1320
257 ttgcagatca tcaaccctga gattatcact cgagatggct tcctgctgct gcagatggac 1380
259 tttggcttcc ctgagcacct gctggtggat ttctccaga gcttgagc 1428
262 <210> SEQ ID NO: 6
263 <211> LENGTH: 496
264 <212> TYPE: PRT
265 <213> ORGANISM: rabbit

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267 <400> SEQUENCE: 6
269 Cys Pro Lys Gly Ala Ser Tyr Glu Ala Gly Ile Val Cys Arg Ile Thr
270 1 5 10 15
273 Lys Pro Ala Leu Leu Val Leu Asn Gln Glu Thr Ala Lys Val Val Gln
274 20 25 30
277 Thr Ala Phe Gln Arg Ala Gly Tyr Pro Asp Val Ser Gly Glu Arg Ala
278 35 40 45
281 Val Met Leu Leu Gly Arg Val Lys Tyr Gly Leu His Asn Leu Gln Ile
282 50 55 60
285 Ser His Leu Ser Ile Ala Ser Ser Gln Val Glu Leu Val Asp Ala Lys
286 65 70 75 80
289 Thr Ile Asp Val Ala Ile Gln Asn Val Ser Val Val Phe Lys Gly Thr
290 85 90 95
293 Leu Asn Tyr Ser Tyr Thr Ser Ala Trp Gly Leu Gly Ile Asn Gln Ser
294 100 105 110
297 Val Asp Phe Glu Ile Asp Ser Ala Ile Asp Leu Gln Ile Asn Thr Glu
298 115 120 125
301 Leu Thr Cys Asp Ala Gly Ser Val Arg Thr Asn Ala Pro Asp Cys Tyr
302 130 135 140
305 Leu Ala Phe His Lys Leu Leu His Leu Gln Gly Glu Arg Glu Pro
306 145 150 155 160
309 Gly Trp Leu Lys Gln Leu Phe Thr Asn Phe Ile Ser Phe Thr Leu Lys
310 165 170 175
313 Leu Ile Leu Lys Arg Gln Val Cys Asn Glu Ile Asn Thr Ile Ser Asn
314 180 185 190
317 Ile Met Ala Asp Phe Val Gln Thr Arg Ala Ala Ser Ile Leu Ser Asp
318 195 200 205
321 Gly Asp Ile Gly Val Asp Ile Ser Val Thr Gly Ala Pro Val Ile Thr
322 210 215 220
325 Ala Thr Tyr Leu Glu Ser His His Lys Gly His Phe Thr His Lys Asn
326 225 230 235 240
329 Val Ser Glu Ala Phe Pro Leu Arg Ala Phe Pro Pro Gly Leu Leu Gly
330 245 250 255
333 Asp Ser Arg Met Leu Tyr Phe Trp Phe Ser Asp Gln Val Leu Asn Ser
334 260 265 270
337 Leu Ala Arg Ala Ala Phe Gln Glu Gly Arg Leu Val Leu Ser Leu Thr
338 275 280 285
341 Gly Asp Glu Phe Lys Lys Val Leu Glu Thr Gln Gly Phe Asp Thr Asn
342 290 295 300
345 Gln Glu Ile Phe Gln Glu Leu Ser Arg Gly Leu Pro Thr Gly Gln Ala
346 305 310 315 320
349 Gln Val Ala Val His Cys Leu Lys Val Pro Lys Ile Ser Cys Gln Asn
350 325 330 335
353 Arg Gly Val Val Val Ser Ser Ser Val Ala Val Thr Phe Arg Phe Pro
354 340 345 350
357 Arg Pro Asp Gly Arg Glu Ala Val Ala Tyr Arg Phe Glu Glu Asp Ile
358 355 360 365
361 Ile Thr Thr Val Gln Ala Ser Tyr Ser Gln Lys Lys Leu Phe Leu His
362 370 375 380

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365 Leu Leu Asp Phe Gln Cys Val Pro Ala Ser Gly Arg Ala Gly Ser Ser
366 385                               390                               395                               400
369 Ala Asn Leu Ser Val Ala Leu Arg Thr Glu Ala Lys Ala Val Ser Asn
370                               405                               410                               415
373 Leu Thr Glu Ser Arg Ser Glu Ser Leu Gln Ser Ser Leu Arg Ser Leu
374                               420                               425                               430
377 Ile Ala Thr Val Gly Ile Pro Glu Val Met Ser Arg Leu Glu Val Ala
378                               435                               440                               445
381 Phe Thr Ala Leu Met Asn Ser Lys Gly Leu Asp Leu Phe Glu Ile Ile
382                               450                               455                               460
385 Asn Pro Glu Ile Ile Thr Leu Asp Gly Cys Leu Leu Leu Gln Met Asp
386 465                               470                               475                               480
389 Phe Gly Phe Pro Lys His Leu Leu Val Asp Phe Leu Gln Ser Leu Ser
390                               485                               490                               495
393 <210> SEQ ID NO: 7
394 <211> LENGTH: 1488
395 <212> TYPE: DNA
396 <213> ORGANISM: rabbit
398 <400> SEQUENCE: 7
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401 ttggtgttga accaagagac ggccaagggt gtccagacgg ccttccagcg cgccggttat      120
403 ccggacgtca gcggcgagag ggccgtgatg ctccctcgcc gggtaagta cgggctgcac      180
405 aacctccaga tcagccacct gtccatcgcc agcagccagg tggagctggg ggacgccaa      240
407 accatcgacg tcgccatcca gaacgtgtcc gtggtcttca aggggaccct gaactacagc      300
409 tacacgagtg cctggggggt gggcatcaat cagtctgtcg acttcgagat cgactctgcc      360
411 attgacctcc agatcaacac agagctgacc tgcgacgtcg gcagtgtgcg caccaatgcc      420
413 cccgactgct acctggcttt ccataaactg ctctgcacc tccaggggga gcgcgagccg      480
415 ggggtggctca agcagctctt cacaaacttc atctccttca ccctgaagct gattctgaag      540
417 cgacaggtct gcaatgagat caacaccatc tccaacatca tggctgactt tgtccagacg      600
419 agggcccgcca gcatcctctc agatggagac atcgggggtg acatttccgt gacgggggcc      660
421 cctgtcatca cagccacctc cctggagtc ccatcacaagg gtcacttcac gcacaagaac      720
423 gtctccgagg ccttccccct ccgcgccttc ccgcccggtc ttctggggga ctcccgcagt      780
425 ctctacttct ggttctccga tcaagtgtc aactccctgg ccagggccgc cttccaggag      840
427 ggccgtctcg tgctcagcct gacaggggat gaggttcaaga aagtgtgga gaccagggt      900
429 ttcgacacca accaggaaat cttccaggag ctttccagag gccttccac cggccaggcc      960
431 caggtagccg tccactgcct taagggtgcc aagatctcct gccagaaccg ggggtgtcgtg      1020
433 gtgtcttctt ccgtcgccgt gacgttccgc ttcccccgcc cagatggccg agaagctgtg      1080
435 gcctacaggt ttgaggagga tatcatcacc accgtccagg cctcctactc ccagaaaaag      1140
437 ctcttcctac acctcttgga ttccagtg gtcgggcca gcggaagggc aggcagctca      1200
439 gcaaactctc ccgtggccct caggactgag gctaaggctg tttccaacct gactgagagc      1260
441 cgctccgagt ccctgcagag ctctctccgc tccctgatcg ccacgggtgg catcccggag      1320
443 gtcatgtctc ggctcgaggt ggcgttcaca gccctcatga acagcaaagg cctggacctc      1380
445 ttcgaaatca tcaaccccg gattatcact ctgatggct gcctgctgct gcagatggac      1440
447 ttcggttttc ccaagcacct gctggtggat ttctgcaga gcctgagc      1488
450 <210> SEQ ID NO: 8
451 <211> LENGTH: 50
452 <212> TYPE: PRT
453 <213> ORGANISM: Artificial Sequence
455 <220> FEATURE:

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VERIFICATION SUMMARY

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L:10 M:270 C: Current Application Number differs, Replaced Current Application Number